

Third Meeting of the Working Group on Risk Analysis of the OIE Region for the Americas

Buenos Aires, Argentina, November 15-17, 2000

Participants:

Ingrid Van der Linden (Canada)

Assad Heneidi (Mexico)

Ken Forsythe (USA)

Eduardo Serrano (OIRSA)

Alejandro López (PANAFTOSA)

José Naranjo (Chile)

Dr. Eduardo Greco of Argentina could not attend the meeting because he was named vice president of SENASA this same week.

Facilitators:

Emilio Gimeno (Representative of the OIE Regional Commission for the Americas)

Cristóbal Zepeda (OIE Collaborating Center Animal Disease Surveillance Systems and Risk Analysis).

Prior to the meeting a two-day course on consequence assessment was presented by Dr. Kenneth W. Forsythe of the OIE Collaborating Center on OIE Collaborating Center Animal Disease Surveillance Systems and Risk Analysis. The objective of the course was to train about methods used for consequence assessment in the risk analysis process. The outline of the course was as follows:

- General concepts on disease transmission
- Review of methods used for release and exposure assessments
- State transition models
- Matrix algebra
- Problems and exercises
- Spatial analysis - GIS
- WTO Dispute settlements

Agenda:

- 1) Review of the consequence assessment section of the OIE Code Chapter on Risk Analysis.
 - a) Discussion on harmonization of methods and techniques for biological consequence assessment
- 2) Presentation of the web page
- 3) Review the proposal for training in epidemiology and risk analysis
 - a) Defining a general strategy for training
- 4) Review the agreements from the last meeting
- 5) Future work of the group
- 6) Agreements

1. Review of the consequence assessment section of the OIE Code Chapter on Risk Analysis

Consequence assessment	<p>This step in the process follows the exposure assessment. The Code divides the consequence into direct and indirect consequences. The SPS agreement describes the consequence from a biological and economic perspective. The group decide to proceed with the discussion with biological and economic consequences. During the process of evaluating consequences the biological consequences must first be evaluated and then based on the results evaluate the economic consequences.</p> <p>Even though the Code does not contemplate the social consequences resulting from the introduction of a pathogenic agent, this should be considered in the decision making process.</p> <p>The group understands that:</p> <p><u>Release assessment</u> - Assessment of the probability of introduction of the identified pathogenic agent from its origin until the point of entry into a country or zone.</p> <p><u>Exposure assessment</u>.- Assessment of the probability of exposure of susceptible species to the identified pathogenic agent in the zone or country of destination.</p> <p><u>Consequences assessment</u>.- Assessment of the biological and economic consequences of the introduction of the identified pathogenic agent</p>
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Biological Consequences	<p>Are those which are derived from the introduction and exposure of the pathogenic agent within a susceptible population.</p> <p>Various aspects which should be considered in the assessment of biological consequences include:</p> <ul style="list-style-type: none"> • Temporal and spacial distribution of susceptible herds and animals • Temporal and spacial distribution of exposed herds and animals • Temporal and spacial distribution of immune herds and animals • Temporal and spacial distribution of infected herds and animals • Characteristic of the agent • Environmental factors • Production and commercial characteristic • Capability of timely detection • Capability of the emergency response <p>There may be more than one biological consequence assessment depending on the routes of exposure and/or the management options selected.</p>
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Methods	<p>Descriptive methods - Description of the epidemiologic factors which contribute to the magnitude of the biological consequences.</p> <p>Qualitative methods - Qualitative categorization of the epidemiologic factors which contribute to the magnitude of the biological consequences.</p> <p>Quantitative methods - Quantification of the epidemiologic factors which contribute to the magnitude of the biological consequences..</p> <p>The same methods used to assess the release and exposure can be used to assess the consequences. In addition the following methods can be used:</p> <ul style="list-style-type: none"> · State transition models, utilizing simple models such as the Markov Chain and Reed Frost models <p>References:</p> <p>Matrix algebra text books</p> <p>McCauley E. H., New J. C. N Aulaqui and Sundquist (1979) A study of the potential economic impact of foot-and-mouth disease in the United States. Joint publication USDA and University of Minnesota TB-1597</p> <p>Veterinary Epidemiology. Martin, Meek and Willeberg</p> <p>Olsen L.F. and Schaffer W.M. (1990) Chaos versus noisy periodicity: Alternative Hypotheses for childhood epidemics. Science</p>
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It was proposed that a paragraph be inserted in the Code prior to the risk assessment steps (Section 1.3.2.4) that emphasizes that the process of risk assessment consists of different steps including hazard identification, release assessment, exposure assessment and consequence assessment. However these steps, with the exception of hazard identification, can be conducted in any order as deemed appropriate.

2. Presentation of the web page

A web page has been developed based on the work of the group. The web page is available at:

<http://www.aphis.usda.gov/oieamericas/oieindex.htm>

The contents of the web page were presented and a discussion held future developments. A request was made that all member of the group review the website to ensure that the links are working properly and for consistency. Comments must be forwarded to Cristóbal Zepeda before January 15, 2001.

A discussion was held on the possible copyright problems of posting literature references. In some OIE publications it was suggested to consult the central office to determine the author's rights in OIE publications.

3. Training and Increasing Awareness

The group identified the need to sensitize directors of veterinary services about the necessity for the development of expertise in the era of risk analysis as well as training at the field operation level.

Raising awareness of directors of veterinary services

1. Seminar on the use and perspective of risk analysis (one day)

Training for technical people - Should be delivered at two levels:

1. Seminar on general concepts of surveillance and analysis of risk (one week)
2. Analytic epidemiology and risk analysis (two courses)
 - Course on basic epidemiology (one week)
 - Course on quantitative risk analysis (one week)

Seminar on the use and perspective of risk analysis

Directed at directors of veterinary services. Present risk analysis in the general context of the SPS agreement; general concepts of risk analysis and finally a description of the minimum requirements for a risk analysis unit.

The recommendation was to carry out this type of seminar associated with regional meetings. Each international organization represented will review the appropriate fora that can be used to show the work of the group. The following meetings were tentatively identified:

OIRSA	Technical Commission Meetings (held twice per year) for a one-day seminar. Meetings held in Central America could also invite Caribbean countries that speak Spanish.
PANAFTOSA	Next COSALFA meeting in March
OIE	Regional Meeting Of The OIE Regional Commission for the Americas

In addition the group will look into the possibility of coordinating the development of training seminars described above with IICA for the English speaking Caribbean countries.

Seminars on general concepts of surveillance and risk analysis

Directed at the technical level. Consider the general principles of surveillance and general concepts of risk analysis.

Basic Epidemiology

Directed at the technical level. Consider general aspects of analytic epidemiology, basic statistics and information systems.

Quantitative risk analysis

Directed at the technical level. Consider quantitative aspects of risk assessments including the development of stochastic models that include variability and uncertainty.

Further Discussion on Training:

The possibility to offer training presentations on the website was discussed. To carry this out, the different presentations that already exist will be analyzed and compiled. The final presentations will be formalized presentations put forward by the group and will have a standard format.

A discussion was held on distance education and web based courses.

México proposed carrying out a course on surveillance and risk analysis to harmonize the methodology used for risk analysis and promote the creation of risk analysis units in the American continent.

The OIE Collaborating center for Risk analysis and Surveillance in Fort Collins is holding a two-week course in Spanish in March or April on basic epidemiology.

4. Review the agreements from the last meeting

Below is a brief review of the agreed tasks from the February meeting of the working group that was held in Fort Collins.

- (a) Website design – Ken Forsythe, Matías Fernández, and Cristóbal Zepeda.
- (b) General review of risk analysis work – Matías Fernández, Eduardo Greco, Ken Forsythe, Jose Naranjo. They will identify some examples of studies that the group considers “best practices” of the risk analysis process.
- (c) Training – Alejandro López Inzaurrealde, Cristóbal Zepeda, Assad Heneidi, and Eduardo Serrano. They will circulate by e-mail the content of courses presented by the collaborating center at Fort Collins. During this meeting the general training strategy was discussed.

- (d) Awareness – We will inform the directors of veterinary services in the region about the activities and results of the group during the meeting of the OIE Regional Commission of the Americas in Cartagena, Colombia.

5. Future work of the group

- a) The group should prepare guidelines on when an RA needs to be carried out and what type of assessment is adequate. Another distinction is the requirement of the risk assessment if it ends up submitted to a dispute panel in the case of a challenge (an issue if the import request is refused). It should comply with requirements based on the legal interpretation of the SPS agreement.
- b) The group should prepare guidelines on the type of information that veterinary services of the exporting country should provide for use in a risk assessment. This will enable each country carry out a self-assessment of its general ability to generate the aforementioned information.
- c) An identified deficiency is that many of the countries do not have in their structure a team whose function is to carry out risk assessments, which therefore does not permit adequate consistency in the focus of the RA. Promote the creation of RA units in countries. *Stu MacDiarmid article on RA Units*
- d) The group should provide a logical framework to structure a risk assessment, not only for importation decisions, but also tool for those making daily decisions and for regionalization.

A discussion was held on the possibility of including new members in the group. Since the beginning it was felt that the group should be kept small and consist of people who work exclusively in RA. Nevertheless it is recognized that it would be appropriate to have representation of the Andean region. Colombia has formed a RA unit and once the names of the members are known the group will look at the possibility of inviting one of the members. The next meeting will end the current phase of work activities and following that will be an appropriate time to invite new members.

A request was put forward to survey the countries to assess the current situation with respect to the capacity countries currently have to carry out risk assessments. Emilio Gimeno proposed to survey the countries to determine what their needs are and what they are currently doing.

Next meeting of the group: San Salvador, El Salvador. A course for will be held June 20-22 followed by a meeting of the group June 25-29 to continue looking at the assessment of economic consequences.

Action Items

Ingrid Van der Linden	Look into whether the Canadian consequence assessment for the for WBNP RA is adequately described to be used as an example
Ken Forsythe	Provide the classical swine fever as an example of a descriptive consequence assessment
José Naranjo	Has committed to send by EM the webpage address for CDC that contains references on zoonoses. This could serve as an example for the structure of the groups website.
The entire group	<p>Review the website and the interpretation document to evaluate the consistency and test whether the links are functioning properly. Comments due to Cristóbal by January 15, 2001</p> <p>Look for examples of biological consequence assessments in the literature.</p> <p>Send to the rest examples of PowerPoint presentation used in courses given.</p>
Cristóbal Zepeda	<p>Restructure the document on the website to reflect the sequence of the January 3, 2001 version of the Code.</p> <p>Send Stu MacDiarmid's document on RA units for comments.</p> <p>Web page.</p> <ul style="list-style-type: none"> · Change "modification of the Code" to interpretation of the Code or something similar. · Update the Code to the most recent version. Fernández · Add a means of communication directly on the web page.
Ken Forsythe Ingrid Van der Linden	Speak with Rob Werge or others experts about the distance education using the web page and other strategies for the type of training the group working on.
Ingrid Van der Linden	Request that Randy Morley provide an update on the work on the manual (Teramo)
Emilio Gimeno	Send a survey to countries to determine their needs are and what they are currently doing in the field of risk analysis